WINNIPEG TRANSIT PARKING GARAGE
SLAB REPAIRS
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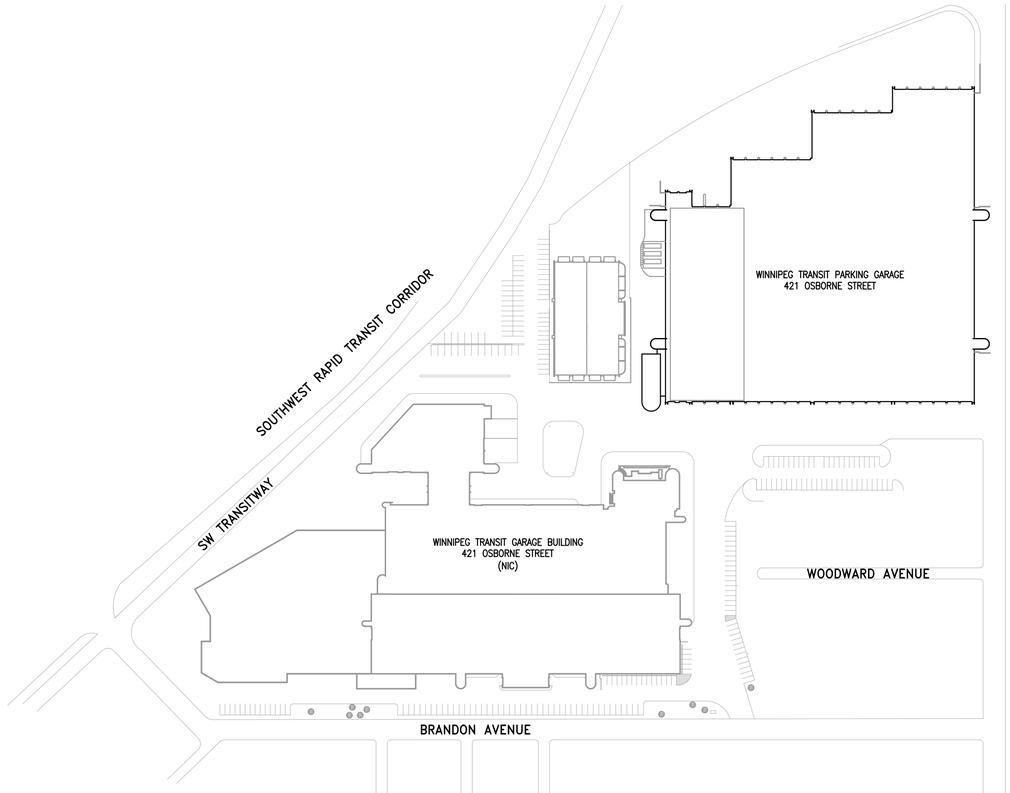
ABBREVIATIONS:

S0.1 DRAWING INDEX, GENERAL NOTES & SITE PLAN

S2.1 MAIN FLOOR PLAN

S4.1 TYPICAL REPAIR DETAILS



N

SITE PLAN
NTS

GENERAL NOTES:

1. STRUCTURAL DESIGN BASED ON THE MANITOBA BUILDING CODE 2011 EDITION.

   A) IMPORTANCE CATEGORY: NORMAL
   B) WIND LOAD: q50 = 9.4 P.S.F.
   C) GROUND SNOW LOAD: Ss = 39.6 P.S.F.
   D) ASSOCIATED RAIN LOAD: Sr = 4.2 P.S.F.

2. SEISMIC SITE CLASSIFICATION: NOT APPLICABLE
3. DO NOT SCALE DRAWINGS.
4. DO NOT BACKFILL UNTIL GROUND FLOOR STRUCTURE IS IN PLACE AND BASEMENT SLABS HAVE BEEN POURED AND CURED.
5. ALL DIMENSIONS ARE TO BE VERIFIED WITH THE PROJECT DRAWINGS AND EXISTING SITE CONDITIONS PRIOR TO CONSTRUCTION.
6. THESE STRUCTURAL DRAWINGS SHOW THE COMPLETED STRUCTURE AND DO NOT INDICATE ALL COMPONENTS NECESSARY FOR SAFETY DURING CONSTRUCTION. THE GENERAL CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SAFETY ON AND AROUND THE JOBSITE DURING CONSTRUCTION INCLUDING BUT NOT LIMITED TO ALL TEMPORARY SHORING/BRACING.

CAST-IN-PLACE CONCRETE

I CONCRETE

1. ALL CONCRETE IS TO BE MANUFACTURED AND INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF CSA-A23.1-09 "CONCRETE MATERIALS AND METHODS OF CONCRETE CONSTRUCTION" AND CSA-A23.2-09 "METHOD OF TEST FOR CONCRETE".
2. PROVIDE CERTIFICATION THAT MIX PROPORTIONS SELECTED WILL PRODUCE CONCRETE OF QUALITY, YIELD AND STRENGTH AS SPECIFIED IN CONCRETE MIXES, AND WILL COMPLY WITH CSA-A23.1. CERTIFICATION LETTER TO BE SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE PROVINCE OF MANITOBA.
3. PROVIDE CERTIFICATION THAT PLANT, EQUIPMENT, AND MATERIALS TO BE USED IN CONCRETE COMPLY WITH REQUIREMENTS OF CSA-A23.1. CERTIFICATION LETTER TO BE SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE PROVINCE OF MANITOBA.
4. CONCRETE TESTING TO BE PERFORMED IN ACCORDANCE WITH CSA-A23.1-09. MINIMUM ONE SET OF TESTS PER POUR. COST OF TESTING TO BE CARRIED BY THE CONTRACTOR.
5. CONCRETE PROPERTIES SHALL BE AS FOLLOWS UNLESS NOTED OTHERWISE ON THE DRAWINGS.

INTERIOR SLABS-ON-GRADE:	32 MPa MIN. AT 28 DAYS CLASS OF EXPOSURE: C-2 ENTRAINED AIR/CATEGORY: 1 (5% TO 8%) AGGREGATE MAX. 20 mm CURING TYPE: TYPE 2 - ADDITIONAL

6. UNLESS NOTED OTHERWISE CONCRETE CURING TO CONFORM TO THE LATEST EDITION OF CSA-A23.1-09 AS FOLLOWS:

   A) TYPE 1 - BASIC: 3 DAYS ≥10°C AND FOR A TIME NECESSARY TO ATTAIN 40% OF THE SPECIFIED STRENGTH.
   B) TYPE 2 - ADDITIONAL: 7 DAYS ≥10°C AND FOR A TIME NECESSARY TO ATTAIN 70% OF THE SPECIFIED STRENGTH.
   C) TYPE 3 - EXTENDED: 7 DAYS WET CURING ≥10°C.

II REINFORCING STEEL

1. ALL REINFORCING STEEL TO BE CSA-G30.18M-M92 GRADE 400R DEFORMED BARS EXCEPT COLUMN TIES AND BEAM STIRRUPS WHICH SHALL BE GRADE 400W STEEL.
2. ALL REINFORCING IS TO BE DETAILED IN ACCORDANCE WITH THE LATEST EDITION OF THE REINFORCING STEEL INSTITUTE OF CANADA - MANUAL OF STANDARD PRACTICE, EXCEPT OTHERWISE NOTED. ALL LAPPED SPLICES TO BE CLASS B SPLICES, UNLESS NOTED.
3. WELDED STEEL WIRE MESH SHALL BE TO ASTM A185/A185M-07, 400 MPa YIELD, FLAT SHEETS ONLY.
4. REINFORCING STEEL COVER IS TO CONFORM TO CAN/CSA A23.3-09 "DESIGN OF CONCRETE STRUCTURES FOR BUILDINGS" AND AS FOLLOWS:

   INTERIOR SLABS-ON-GRADE:
   EXPOSURE CLASS: C-2 1 1/2 IN. TOP 1 1 /2 IN. BOTTOM

5. IN SLABS ON GRADE, BARS TO BE LAPPED WITH CLASS A TENSION SPLICES, EXCEPT AS NOTED.
6. ALL OPENINGS IN CAST-IN-PLACE CONCRETE FLATWORK TO BE TRIMMED WITH 2-15M ALL AROUND ON BOTH FACES, EXCEPT AS NOTED.

ABBREVIATIONS:

@	AT (SPACING)	EW	EACH WAY	O/O	OUT TO OUT
AB	ANCHOR BOLT	EXIST	EXISTING	O/F	OUTSIDE FACE
ADJ	ADJUSTABLE	EXP	EXPANSION	OH	OVERHEAD
AFF	ABOVE FINISHED FLOOR	EXT	EXTERIOR	OPNG	OPENING
ALT	ALTERNATE	FDN	FOUNDATION	OWSJ	OPEN WEB STEEL JOIST
ARCH	ARCHITECT, ARCHITECTURAL	FF	FAR FACE	Pa	PASCAL
BOT, B	BOTTOM	FIN	FINISHED	PC	PRECAST
B PL	BASE PLATE	FL	FLOOR	PERP	PERPENDICULAR
BC	BOTTOM CHORD	FS	FAR SIDE	PL, t	PLATE
BD	BOARD	FT	FOOT/FEET	PLF	POUNDS PER LINEAL FOOT
BTWN	BETWEEN	FTG	FOOTING	PLYWD	PLYWOOD
BLDG	BUILDING	GA	GAUGE	PREFAB	PREFABRICATED
BLK	BLOCK	GALV	GALVANIZED	PROJ	PROJECTION
BLL	BOTTOM LOWER LAYER	GEN	GENERAL	PSF	POUNDS PER SQUARE FOOT
BM	BEAM	GR	GRADE	PSI	POUNDS PER SQUARE INCH
BRDG	BRIDGING	GRAN	GRANULAR	PT	PRESSURE TREATED
BRG	BEARING	H	HIGH	R	RADIUS, REACTION
BRG PL	BEARING PLATE	H	HORIZONTAL FORCE (UNFACTORED)	REF	REFERENCE
BS	BOTH SIDES	HC	HOLLOWCORE	REINF	REINFORCE, REINFORCEMENT
BSMT	BASEMENT	HEX	HEXAGON	REM	REMAINDER
BUL	BOTTOM UPPER LAYER	HORIZ	HORIZONTAL	REQ	REQUIRED
C	COMPRESSION (UNFACTORED)	Hf	HORIZONTAL FORCE (FACTORED)	REV	REVISION, REVISED
C/C	CENTRE TO CENTRE	HM	HOLLOW METAL	RO	ROUGH OPENING
C/W	COMPLETE WITH	HP	HIGH POINT	R/W	REINFORCE WITH
℄	CENTRE LINE	HT	HEIGHT	SCHED	SCHEDULE
CANT	CANTILEVER	IC	IN CENTRE	SECT	SECTION
CAP.	CAPACITY	ID	INSIDE DIAMETER	SIM	SIMILAR
CEM	CEMENT	I/F	INSIDE FACE	SJ	STRUT JOIST
Cf	COMPRESSIVE FORCE (FACTORED)	INSUL	INSULATION	S1E	STRUT ONE END
CHAN	CHANNEL	INT	INTERIOR	SL	SLAB
CI	CAST IRON	JST	JOIST	SOG	SLAB ON GRADE
CIP	CAST-IN-PLACE	JT	JOINT	SPEC	SPECIFICATIONS
CJ	CONTROL JOINT	kg	KILOGRAM	SPF	SPRUCE-PINE-FIR
CLR	CLEAR	KiP, K	1000 LB	SQ	SQUARE
CMU	CONCRETE MASONRY UNIT	KLF	kip(s) PER LINEAL FOOT	STD	STANDARD
COL	COLUMN	kN	KILONEWTON	STR	STAIR
COMP	COMPOSITE	KO	KNOCKOUT	STIFF	STIFFENER
CONC	CONCRETE	kPa	KILOPASCAL	STIR	STIRRUP
CONN	CONNECT, CONNECTION	KSF	kip(s) PER SQUARE FOOT	STL	STEEL
CONSTR	CONSTRUCTION	KSI	kip(s) PER SQUARE INCH	STRUCT	STRUCTURAL
CONT	CONTINUOUS	L	LOW	SYM	SYMMETRICAL
CORR	CORRIDOR	LB, #	POUND(S)	T	TENSION (UNFACTORED)
DBL	DOUBLE	LG	LONG	T	TOP
DEFL	DEFLECTION	LL	LIVE LOAD	T/O	TOP OF
DEMO	DEMOLISH, DEMOLITION	LL	LOWER LAYER	T&B	TOP & BOTTOM
DEPR	DEPRESSION	LLV	LONG LEG VERTICAL	TEMP	TEMPORARY
DET	DETAIL	LLH	LONG LEG HORIZONTAL	Tf	TENSION FORCE (FACTORED)
DEV	DEVELOP, DEVELOPMENT	LONG	LONGITUDINAL	THRU	THROUGH
ø,	DIA DIAMETER	LP	LOW POINT	TLL	TOP LOWER LAYER
DIAG	DIAGONAL	m	METRE	TRANS	TRANSVERSE
DIM	DIMENSION	mm	MILLIMETRE	TS	TEMPERATURE STEEL
DIR	DIRECTION	MAS	MASONRY	TUL	TOP UPPER LAYER
DL	DEAD LOAD	MAX	MAXIMUM	TYP	TYPICAL
DN	DOWN	MECH	MECHANICAL	UHMW	ULTRA HIGH MOLECULAR WEIGHT
DP	DEEP	MEZZ	MEZZANINE	UL	UPPER LAYER
DR	DOOR	Mf	FACTORED MOMENT	U/N	UNLESS OTHERWISE NOTED
DFIR	DOUGLAS FIR	MIN	MINIMUM	U/S	UNDERSIDE
DWG	DRAWING(S)	MISC	MISCELLANEOUS	V	VERTICAL SHEAR (UNFACTORED)
DWL	DOWEL(S)	MK	MARK	VERT	VERTICAL
EA	EACH	MO	MASONRY OPENING	Vf	VERTICAL SHEAR (FACTORED)
EE	EACH END	MOM	MOMENT	W	WIDE, WIDTH
EF	EACH FACE	MPa	MEGAPASCAL	W/	WITH
EJ	EXPANSION JOINT	NIC	NOT IN CONTRACT	W/O	WITHOUT
EL	ELEVATION	NF	NEAR FACE	WD	WOOD
ELEV	ELEVATOR	NO.	NUMBER	WP	WORK POINT
ELEC	ELECTRICAL	NOM	NOMINAL	WT	WEIGHT
ENG	ENGINEER	NTS	NOT TO SCALE	WWM	WELDED WIRE MESH
EQ	EQUAL	N-S	NORTH-SOUTH	X-BRACE	CROSS BRACING
EQUIP	EQUIPMENT	NS	NELSON STUD		
ES	EACH SIDE	O/C	ON CENTRE		
E-W	EAST-WEST	OD	OUTSIDE DIAMETER		

The General Contractor shall check & verify all dimensions and report any errors or omissions to the designers.

No.	Date	Issue/Revision	By
0	2022-06-08	ISSUED FOR CONSTRUCTION	PDG

ENGINEERS GEOSCIENTISTS MANITOBA
Certificate of Authorization
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Sheet Title
DRAWING INDEX, GENERAL NOTES
AND SITE PLAN

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